CLAIMS:

1. A detector comprising a base structure (1, 1', 1", 1'") with guide elements (2),
- detector modules (3) with at least one respective guide structure (4) for positioning relative to at least one of the respective guide elements (2), wherein
- the guide elements (2) extend in a first direction,
- at least two of the detector modules (3) are positioned consecutively on one of the guide elements (2) in the first direction (R1) and
- there are guide elements (2) which are separated from one another in a second direction (R2).

2. A detector as claimed in claim 1, characterized in that at least two of the detector modules (3) in the second direction (R2) are arranged consecutively on at least two of the guide elements (2).

3. A detector as claimed in claim 1 or 2, characterized in that at least one spacer element (21) is arranged on at least one of the guide elements (2) between the base structure (1, 1', 1", 1'") and one of the detector modules (3) or between two of the detector modules (3).

4. A detector as claimed in any one of claims 1 to 3, characterized in that the guide elements (2) in the second direction (R2) are arranged next to one another with a spacing pattern and the extent of the detector modules (3) in the second direction (R2) substantially equals a spacing between two of the guide elements (2).

5. A detector as claimed in any one of claims 1 to 4, characterized in that the base structure (1, 1', 1", 1'") is curved in the second direction (R2).

6. A detector as claimed in any one of claims 1 to 5, characterized in that at least two of the detector elements (3) have a different shape.

7. A detector as claimed in any one of claims 1 to 6, characterized in that the guide elements (2) are rods.

8. A detector as claimed in any one of claims 1 to 7, characterized in that at least one clamping element (22) is provided for fixing one of the detector modules (3).

9. A detector according to any one of claims 1 to 8, characterized in that the detector modules (3) each have at least one respective continuous recess (31) in the first direction (R1).

10. An X-ray device in which a detector as claimed in any one of claims 1 to 9 is used.

11. Method for manufacturing a detector, in particular for use in an X-ray device, in which detector modules (3) are slipped each on at least one guide element (2) by means of at least one respective guide structure (4) of the respective detector module (3), whereby the guide elements (2) extend in a first direction (R1) of a base structure (1, 1', 1", 1"') and wherein at least two of the detector modules (3) being consecutively slipped onto one of the guide elements (2) and there are detector modules (3) that are separated from one another in a second direction (R2).